BIOLOGICAL RESOURCES REPORT

GENERAL BIOLOGICAL SURVEY
FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS

Conner Residence Cingular Wireless Facility County of San Diego, California Case Number: ZAP 03-056/MUP 03-074 Environmental Log Number: ER 03-02-037

August 25, 2004

Prepared for: PlanCom Inc.

Contact: Ms. Karen Adler 302 State Place Escondido, California 92029 Phone: (760) 715-3416 Fax: (760) 735-4913

Prepared by:

Merkel & Associates, Inc.

Contact: Ms. Diana M. Jensen 5434 Ruffin Road San Diego, California 92123 Phone: (858) 560-5465 Fax: (858) 560-7779

E-mail: djensen@merkelinc.com

Diana M. Jensey

Diana M. Jensen, Lead Biologist/Project Manager

Melissa a Boker

TABLE OF CONTENTS

SUMMARY OF FINDINGS	1
INTRODUCTION	2
Proposed Project	2
PROJECT LOCATION	
GENERAL PHYSIOGRAPHY	
METHODS AND SURVEY LIMITATIONS	
WETHODS AND SURVEY LIMITATIONS	4
RESULTS	5
VEGETATION COMMUNITIES/FLORA	5
Coastal Sage-Chaparral Scrub	5
Disturbed Habitat	
Non-Native Vegetation	7
Urban/Developed Land	
WILDLIFE HABITAT/FAUNA	
SENSITIVE BIOLOGICAL RESOURCES	7
Regional Sensitive Habitats	7
Coastal Sage Scrub	7
Designated Coastal California Gnatcatcher Critical Habitat	8
Designated Arroyo Toad Critical Habtiat	8
Pre-Approved Mitigation Area/Habitat Linkages and Corridors	8
Rare, Threatened, Endangered, Endemic and/or Sensitive Species, or MSCP Covered Speci	es8
PROJECT IMPACT ANALYSIS	13
DIRECT IMPACTS	13
Vegetation Community Direct Impacts	
Designated Critical Habitat Direct Impacts	
Sensitive Species Direct Impacts	
INDIRECT IMPACTS	
CUMULATIVE IMPACTS	
MITIGATION REQUIREMENTS AND RECOMMENDATIONS	14
LITERATURE CITED	16
LIST OF TABLES	
Table 1. Summary of Biological Survey Dates, Times, Conditions, and Authorized Staff	4
Table 2. Rare, Threatened, Endangered, Endemic and/or Sensitive Species, Known or with a	4.0
Potential to Occur on the Project Site.	
Table 3. Quantitative Summary of On-site Vegetation Community Impacts.	13

LIST OF FIGURES

Figure 1. Project Vicinity Map. Figure 2. Biological Resources Map.	
LIST OF APPENDICES	
APPENDIX 1. PROJECT SITE PHOTOGRAPHS	
APPENDIX 2. FLORA SPECIES OBSERVED ON-SITE	
APPENDIX 3. FAUNA SPECIES OBSERVED OR DETECTED ON-SITE	
APPENDIX 4. CALIFORNIA NATIVE SPECIES FIELD SURVEY FORMS	

BIOLOGICAL RESOURCES REPORT GENERAL BIOLOGICAL SURVEY FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS

Conner Residence Cingular Wireless Facility County of San Diego, California Case Number: ZAP 03-056/MUP 03-074

> Merkel & Associates, Inc. August 25, 2004

SUMMARY OF FINDINGS

The Conner Residence Cingular Wireless Facility project site is located in the North County Subarea of the Multiple Species Conservation Program within Section 2, Township 9 South, Range 2 West of the United States Geological Survey Pala, California Quadrangle. The approximate 2.17-acre site is located on a steep, southwestern-facing hillside at an approximate elevation of 960 feet above Mean Sea Level, and consists primarily (1.09 acres) of high value Coastal Sage-Chaparral Scrub habitat. The project site is located within the United States Fish and Wildlife Service recommended survey area for the federally-listed endangered Quino Checkerspot Butterfly (Euphydryas editha quino), as well as designated critical habitat for the federally-listed, threatened Coastal California Gnatcatcher (Polioptila californica californica) and endangered, Arroyo Toad (Bufo californicus). Native habitat surrounds and continues beyond the project site along the San Luis Rey River basin; however, the site has a low potential for functioning as a local wildlife corridor due to the extremely steep hillside terrain. Two regionally sensitive flora species, Cismontane Nolina (Nolina cismontana) and Parry's Tetracoccus (Tetracoccus dioicus), were identified on the project site during the biological surveys. No Coastal California Gnatcatchers were detected in the project area during focused surveys. The proposed project would result in permanent, direct impacts to 0.03 acre of Coastal Sage-Chaparral Scrub and designated critical habitat for the Coastal California Gnatcatcher and Arroyo Toad. These impacts are significant and would require that mitigation measures reduce impacts to a level below significant. Implementation of the project mitigation measures should reduce biological impacts to a level below significant and ensure compliance with the California Environmental Quality Act and the County of San Diego Resource Protection Ordinance.

INTRODUCTION

Merkel & Associates, Inc. (M&A) conducted a general biological survey, as well as focused Coastal California Gnatcatcher (*Polioptila californica californica*) surveys on the Conner Residence Cingular Wireless Facility project site, at the request of PlanCom Inc. The purpose of this investigation was to determine the extent of biological resources present on the project site, identify potential biological resource impacts resulting from the proposed project, and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with the California Environmental Quality Act (CEQA) and County of San Diego ordinances.

PROPOSED PROJECT

The proposed project involves the construction of a Cingular® telecommunications facility on an existing single-family residence property. The facility will consist of a 40-foot high artificial pine tree (monopine) mounted with 12 panel antennas, with a underground coax cable run to four outdoor equipment cabinets located on a concrete pad behind a retaining wall approximately 90 feet south of the monopine, adjacent to the northern side of an existing Verizon® telecommunications equipment shelter, and an equipment rack located adjacent to the southern side of the Verizon® facility. The County of San Diego Cellular Facilities Standards for Fire Protection (FP-2) policy will require maintenance of a 30-foot fuel modification area around the equipment cabinets. An existing approximate 15-foot wide paved road will provide access to the project area, and an existing approximate 13-foot wide dirt road will provide direct access to the construction site.

PROJECT LOCATION

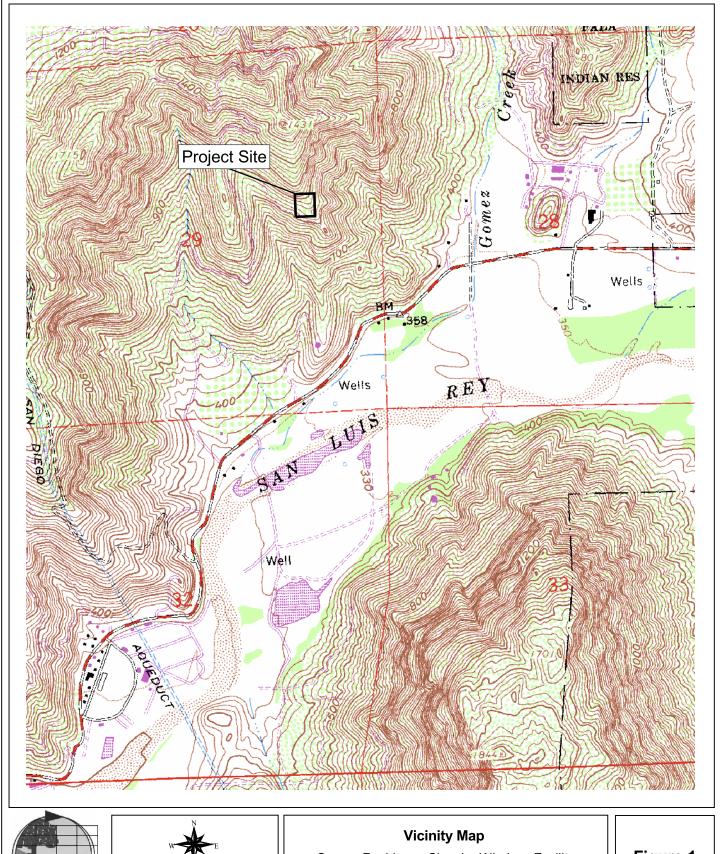
The approximate 12.91-acre property, Assessor's Parcel Number 110-072-19, is regionally situated in the North County Subarea of the Multiple Species Conservation Program, at 10590 Pala Road/Highway 76 (Figure 1). The approximate 2.17-acre project site is located within Section 29 of Township 9 South, Range 2 West of the United States Geological Survey Pala, California Quadrangle (Latitude 033° 22' 00.0"N, Longitude 117° 06' 22.0"W; Universal Transverse Mercator coordinates ⁰⁴90^{128E}, ³⁶91^{749N} Zone 11).

GENERAL PHYSIOGRAPHY

The project site is located on a steep, southwestern-facing hillside at an approximate elevation of 960 feet above Mean Sea Level (MSL) (Appendix 1). Underlying surficial geology is mapped as Mesozoic basic intrusive rocks (Strand 1962), and on-site soils are mapped as Las Posas stony fine sandy loam, 30 to 65 percent slopes (Bowman, *et al* 1973). A single-family residence and an SDG&E tower are located to the north and northeast of the site, respectively, and native habitat is located to the east, south, and west of the project site.

METHODS AND SURVEY LIMITATIONS

Existing literature pertaining to the project site was reviewed prior to the initiation of the field surveys. This literature review included examination of the previous biological reports prepared for the on-site Verizon® telecommunications facility (Merkel & Associates, Inc. 2001a,b, 2000), a query of potential on-site sensitive species based on the general physiography of the site (including habitat, eco-region, elevation, soils/substrate, and topography), and documentation of California Natural







Conner Residence Cingular Wireless Facility USGS Pala, CA Quadrangle

Figure 1

Merkel & Associates, Inc.-

Diversity Database records for the project region. The information was used to assess the presence or potential for presence of sensitive habitats and species on or near the project site.

M&A biologists, Diana M. Jensen and Melissa A. Booker (San Diego County Certified Biologist), conducted a general botanical and zoological survey of the project site on September 5, 2003 (Table 1). Vegetation communities present on the site, as well as within 100 feet of all proposed project elements (as required by the County of San Diego Biological Mapping Guidelines), were surveyed on-foot. Survey information was recorded in field notebooks and mapped onto a topographical map of the project site. Plant identifications were either resolved in the field or later determined through verification of voucher specimens, and wildlife species were noted through direct observation, identification of avian songs or call notes, or by observation of indirect sign (burrows, tracks, scat, etc.). Photographs of the proposed facility site were taken to record the biological resources present on the project site.

M&A permitted biologists, Geoffery L. Rogers and Antonette T. Gutierrez, conducted three focused surveys for the federally listed, threatened Coastal California Gnatcatcher, as authorized under federal Endangered Species Act section 10(a)(1)(A) permit #797999-5 and M&A/California Department of Fish and Game Memorandum of Understanding (Table 1). The surveys were conducted according to the recommended guidelines noted in the U.S. Fish and Wildlife Service (USFWS) Coastal California Gnatcatcher Survey Protocol, dated February 28, 1997. Taped recordings of gnatcatcher vocalizations, as well as "pishing", were used to elicit initial vocal responses approximately every 100-200 feet, and an approximate five to ten minute time interval was allowed for a response, particularly from advantageous viewpoints.

Table 1. Summary of Biological Survey Dates, Times, Conditions, and Authorized Staff.

Biological Survey	Date	Time	Conditions (start-end)	M&A Biologists
General Biology	September 5, 2003	0930- 1045	Weather: 0-0% (cc) Wind: 1-1 (BS) Temperature: 75°-80°F	Diana M. Jensen Melissa A. Booker
CAGN Survey #1	September 16, 2003	0945- 1045	Weather: 0-0% (cc) Wind: 1-1 (BS) Temperature: 68°-68°F	Geoffery L. Rogers
CAGN Survey #2	September 23, 2003	0900- 1100	Weather: 0-0% (cc) Wind: 1-1 (BS) Temperature: 72°-74°F	Antonette T. Gutierrez
CAGN Survey #3	September 30, 2003	0945- 1045	Weather: 50-50% (cc) Wind: 1-1 (BS) Temperature: 73°-80°F	Geoffery L. Rogers

cc = cloud cover; BS = Beaufort Scale; F = Fahrenheit

The aforementioned field surveys were conducted to generally assess the biological resources present and/or potentially present within the study area. However, since the surveys were conducted within a single season and only during daylight hours, some species of annual plants, butterflies, migratory birds, and mammals may not have been detected due to seasonal and temporal species variability.

The project site is located within the current USFWS recommended survey area for the federally endangered, Quino Checkerspot Butterfly (*Euphydryas editha quino*). Focused Quino Checkerspot

Butterfly surveys were previously conducted on this site, associated with the Verizon® telecommunications facility, in the spring of 2001, and the species was not detected within the project area (Merkel & Associates, Inc. 2001a). However, depending on the timeline of project approval, updated focused Quino Checkerspot Butterfly surveys may be recommended on the project site in the spring of 2004.

Based on the literature research conducted and knowledge of species-specific habitat requirements, no further biological survey limitations are expected for the proposed project.

Scientific nomenclature used in this report is from the following references: vegetation communities, Holland (1986) and Oberbauer (1996); flora, Hickman (1993); butterflies, Opler and Wright (1999); amphibians and reptiles, Crother (2000); birds, American Ornithologists' Union (1998, 2003); and mammals, Wilson and Reeder (1993).

RESULTS

VEGETATION COMMUNITIES/FLORA

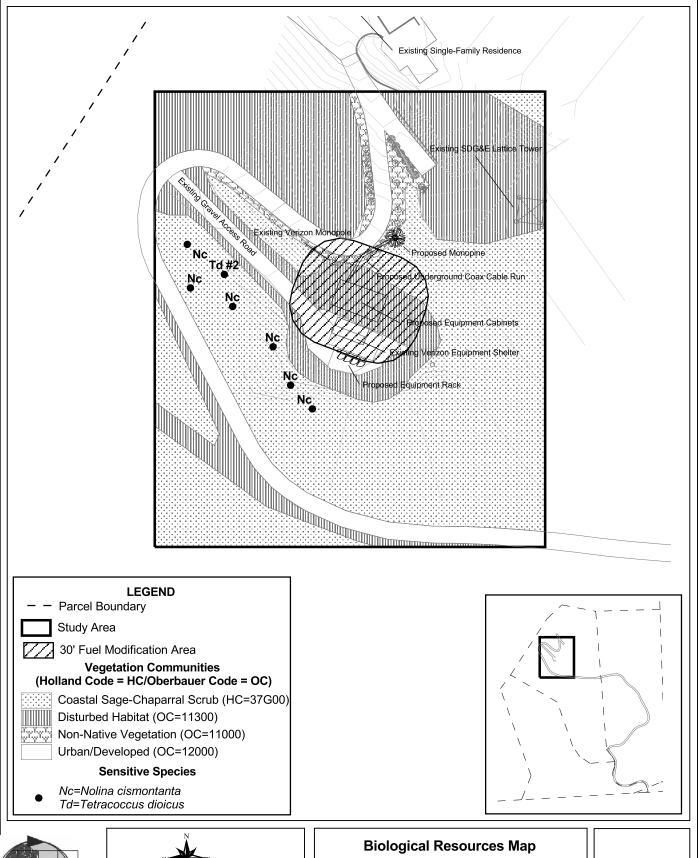
Four vegetation communities, classified according to the most current Holland Code (HC) classification system (Oberbauer 1996, Holland 1986), were identified on the project site (Figure 2). The following text discusses the on-site characteristics of these vegetation communities, which include Coastal Sage-Chaparral Scrub, Disturbed Habitat, Urban/Developed Land, and Non-Native Vegetation, as well as the associated floral resources (Appendix 2).

Coastal Sage-Chaparral Scrub

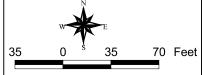
Coastal Sage-Chaparral Scrub (HC 37G00) occupies approximately 1.09 acres of land on the project site, primarily on the slope south of the existing Verizon® telecommunications facility. A portion of this vegetation type is disturbed on the hillside adjacent to the northern side of the Verizon® equipment shelter. Shrubby chaparral plants are sparsely distributed throughout the habitat, with sage scrub plants occurring intermittently in the understory. The habitat is dominated by Flat-top Buckwheat (*Eriogonum fasciculatum* var. *polifolium*) with inclusions of several chaparral plants, such as Holly-leaf Redberry (*Rhamnus ilicifolia*), Chamise (*Adenostoma fasciculatum*), and Mission Manzanita (*Xylococcus bicolor*). Additional common flora species include California Sagebrush (*Artemesia californica*), Laural Sumac (*Malmosa laurina*), Deerweed (*Lotus scoparius* ssp. *brevialatus*), and Black Sage (*Salvia mellifera*). Despite the presence of sage scrub elements, the overall quality of the Coastal Sage-Chaparral Scrub is representative of an extremely open chaparral shrub dominated habitat. This condition is attributed to an unusual soil substrate where the open vegetation allows for ecotonal sage shrub herbaceous elements to grow interdigitated among the chaparral shrubs.

Disturbed Habitat

Approximately 0.72 acre of Disturbed Habitat (HC 11300) is located on the project site, including areas surrounding the single-family residence and Verizon® telecommunications facility, as well as along the access roads. The hillside immediately southwest of the single-family residence and north of the paved access road is cleared annually for fuel modification and leech field reserve purposes (pers. com. as cited in: Merkel & Associates, Inc. 2001, p. 7). In addition, an approximate 30-foot







Conner Residence Cingular Wireless Facility
APN 110-072-19

Figure 2

fuel modification zone surrounds the Verizon® equipment shelter. These areas are dominated by bare ground and/or invasive, broad-leaved, non-native plant species, such as Flax-leaf Fleabane (Conyza bonariensis), Common Sow Thistle (Sonchus oleraceus), Tocalote (Centaurea melitensis), and Short-pod Mustard (Hirschfeldia incana). Consistent with the County of San Diego Biological Resource Mapping Requirements, these areas are classified as disturbed because 1) the land has been permanently altered by previous legal human activity, 2) the land does not provide future biological value for most species, 3) the land does not exhibit native or naturalized vegetation remains, and 4) the land does not provide moderate or high value for sensitive wildlife, including potential raptor foraging.

Non-Native Vegetation

Non-Native Vegetation (HC 11000) comprises approximately 0.06 acre of land along the existing paved access road near the single-family residence. Exotic flora species include eucalyptus (*Eucalyptus* sp.), iceplant (*Mesembryanthemum* sp.), Date Palm (*Phoenix* sp.), and American Agave (*Agave americana*).

Urban/Developed Land

Approximately 0.30 acre of Urban/Developed Land (HC 12000), which includes the existing Verizon® telecommunications facility and access roads, is located on the project site.

WILDLIFE HABITAT/FAUNA

Locally common species of butterflies and birds were identified on the project site during the biological surveys. Behr's Metalmark (*Apodemia mormo virgulti*), Western Tiger Swallowtail (*Papilio rutulus*), and Checkered White (*Pontia protodice*) butterflies were noted nectaring on sage scrub plants, and several birds were observed foraging in the sage-chaparral scrub habitat, including Wrentit (*Chamaea fasciata*), Bushtit (*Psaltriparus minimus*), California Towhee (*Pipilo crissalis*), and Lesser Goldfinch (*Carduelis psaltria*). Two Red-tailed Hawks (*Buteo jamaicensis*) were also noted flying over the site; however, the project site is not expected to support an abundant or diverse prey base for raptor foraging. Overall, the wildlife habitat on-site is designated as "high" value (County of San Diego 2002b), based on the connection of the vegetation to native habitat surrounding and continuing well beyond the project site.

SENSITIVE BIOLOGICAL RESOURCES

Regional Sensitive Habitats

Sensitive habitats include vegetation communities that support rare and endangered species, and/or have been substantially depleted by development, or are naturally limited in distribution within a certain region (California Resources Agency 2001, δ 15380). Three regionally sensitive habitats are identified on the project site: 1) Coastal Sage Scrub; 2) Designated Critical Habitat for the Coastal California Gnatcatcher; and 3) Designated Critical Habitat for the Arroyo Toad.

Coastal Sage Scrub

Coastal Sage Scrub is considered to be a sensitive habitat type due to its declining area in southern California and the several regionally sensitive wildlife species dependent on the use of the habitat

(Ogden 1998, 2-1). The Coastal Sage-Chaparral Scrub on-site shows evidence of disturbance due to the exisiting Verizon® telecommunications facility; however, the habitat is still considered to have high value based on the location of the project site within a large block of native habitat.

Designated Coastal California Gnatcatcher Critical Habitat

The project site is located within Unit 5 of USFWS designated critical habitat for the Coastal California Gnatcatcher (USFWS 2000, p. 63686). Unit 5 encompasses approximately 40,640 acres of land within the planning area for the North County Subarea of the MSCP for San Diego County. These lands consist of several core gnatcatcher populations and sage scrub habitat identified as high or moderate value, and serve as the primary inland linkage between San Diego gnatcatcher populations and those located in southwestern Riverside County (Unit 10).

Designated Arroyo Toad Critical Habtiat

The project site is located within Unit 14 of USFWS designated critical habitat for the federally-listed, endangered Arroyo Toad (*Bufo californicus*) (USFWS 2001, p. 9418-9423). Unit 14 encompasses approximately 18,455 acres of land within portions of the lower and middle San Luis Rey River Basin below Lake Henshaw and adjacent uplands, and includes sections of Pala and Keys creeks. Although the project area is located within designated Arroyo Toad critical habitat, the project site does not contain the primary constituent upland habitat element needed by this species for aestivation. The project site is located on a steep slope at an approximate elevation of 960 feet above MSL, over 600 feet in elevation above the San Luis Rey River (approximately 350 feet above MSL), and lacks the alluvial streamside terraces adjacent to valley bottomlands, with areas of loose soil where toads can burrow and forage.

Pre-Approved Mitigation Area/Habitat Linkages and Corridors

The project site consists of habitat designated as "high" value on the MSCP Habitat Evaluation Map. Native habitat surrounds and continues beyond the project site along the San Luis Rey River basin; however, the site has a low potential for functioning as a local wildlife corridor due to the extremely steep terrain.

Rare, Threatened, Endangered, Endemic and/or Sensitive Species, or MSCP Covered Species

Two sensitive flora species, Cismontane Nolina (*Nolina cismontana*) and Parry's Tetracoccus (*Tetracoccus dioicus*), were identified on the project site during the biological surveys. Several scattered plants and one large patch of Cismontane Nolina, as well as two individuals of Parry's Tetracoccus, are found along the hillside immediately west of the existing Verizon® telecommunications equipment shelter. Cismontane Nolina and Parry's Tetracoccus are considered to be regionally rare and limited in distribution in southern California by the California Native Plant Society (CNPS), respectively, but are not listed by federal and/or state agencies (CDFG 2003d).

No Coastal California Gnatcatchers were detected on the project site during the focused surveys. In addition, no gnatcatchers were detected on the project site during focused surveys conducted in the fall of 2000 (Merkel & Associates, Inc. 2000). The Coastal Sage-Chaparral Scrub is atypical of gnatcatcher habitat given the open and unusually low-growing vegetation dominated by sporadic

chaparral shrubs. Therefore, Coastal California Gnatcatcher is not expected to occupy the project site.

Table 2 summarizes the presence or potential for presence of rare, threatened, endangered, endemic, and/or sensitive species, to occur on the project site, based on the habitat present, as well as site ecoregion, elevation, soils/substrate, and topography.

Table 2. Rare, Threatened, Endangered, Endemic and/or Sensitive Species, Known or with a Potential to Occur on the Project Site.

Scientific Name	Common Name	Federal/State Listing ¹	Additional Listings ²	Suitable Habitat On-Site ³	Status On-Site	
Plants						
Ceanothus verrucosus	Wart Stemmed Ceanothus	None/None	CNPS List 2	СНР	Not Present; distinct shrub not observed	
Dichondra occidentalis	Western Dichondra	None/None	CNPS List 4	CSS, CHP	Not Expected; east of known coastal range	
Nolina cismontana	Cismontane Nolina	None/None	CNPS List 1B	CSS, open CHP	Present	
Tetracoccus dioicus	Parry's Tetracoccus	None/None	CNPS List 1B	Open CHP	Present	
		Invert	tebrates			
Euphydryas editha quino	Quino Checkerspot Butterfly	FE/None	N/A	Open CSS	Low Potential; host plant and species not detected during 2001 surveys/nearest known population 20 miles southeast of site (M&A 2001a)	
		Amp	hibians			
Bufo californicus	Arroyo Toad	FE/CSC	N/A	CSS	Not Expected; lack of primary constituent upland habitat	
		Rej	ptiles			
Cnemidophorus hyperythrus beldingi	Beldings Orange throat Whiptail	None/CSC	N/A	CSS, CHP	Potentially Present; suitable habitat	
Anniella pulchra pulchra	Silvery Legless Lizard	FSC/CSC	N/A	CSS	Not Expected; lack of loose sandy soils typically used by this species	
Crotalus ruber ruber	Northern Red-diamond Rattlesnake	None/CSC	N/A	CSS, CHP	Expected; suitable habitat	

Scientific Name	Common Name	Federal/State Listing ¹	Additional Listings ²	Suitable Habitat On-Site ³	Status On-Site	
Birds						
Accipiter striatus	Sharp-shinned Hawk	CSC/*None	N/A	CSS	Potentially Present; suitable migrating habitat	
Polioptila californica californica	Coastal California Gnatcatcher	FT/CSC	N/A	CSS	Not Expected; species not detected during 2000 and 2003 focused surveys	
Aimophila ruficeps canescens	Rufous-crowned Sparrow	None/CSC	N/A	CSS, low open CHP	Potentially Present; suitable habitat, but not observed on-site	
Amphispiza belli belli	Bell's Sage Sparrow	FSC/CSC	N/A	CSS	Potentially Present; suitable habitat/CNDDB occ. approx. 200' southwest of site	
		Man	nmals			
Antrozous pallidus	Pallid Bat	None/CSC	N/A	CSS, CHP	Low Potential; foraging habitat on-site, but lack of crevices suitable for roosting on-site	
Choeronycteris mexicana	Mexican Long-tounged Bat	None/CSC	N/A	CSS, CHP	Low Potential; foraging habitat on-site, but lack of caves suitable for roosting on-site	
Eumops perotis	Western Mastiff Bat	FSC/CSC	N/A	CSS, CHP	Not Expected; foraging habitat on-site, but lack of cliff roosting in site vicinity	

Scientific Name	Common Name	Federal/State Listing ¹	Additional Listings ²	Suitable Habitat On-Site ³	Status On-Site
Nyctinomops femorosaccus	Pocketed Free-tailed Bat	None/CSC	N/A	CSS, CHP	Not Expected; foraging habitat on-site, but lack of cliff roosting in site vicinity
Nyctinomops macrotis	Big Free-tailed Bat	None/CSC	N/A	CSS, CHP	Not Expected; foraging habitat on-site, but lack of cliff roosting in site vicinity
Myotis yumanensis	Yuma Myotis	FSC/None	N/A	CSS, CHP	Low Potential; foraging habitat on-site, but lack of crevices suitable for roosting on-site
Lepus californicus bennettii	San Diego Black-tailed Jackrabbit	None/CSC	N/A	CSS, CHP	Potentially Present; suitable habitat
Chaetodipus californicus femoralis	Dulzura California Pocket Mouse	None/CSC	N/A	Open CSS	Potentially Present; suitable habitat
Chaetodipus fallax fallax	Northwestern San Diego Pocket Mouse	None/CSC	N/A	Open CSS	Potentially Present; suitable habitat
Dipodomys stephensi	Stephen's Kangaroo Rat	FE/ST	N/A	CSS, CHP	Not Expected; typical flat open terrain habitat for this species is not present on-site

¹Federal/State Listing

FE = Federally-listed as Endangered; FT = Federally-listed as Threatened; FPE = Federally proposed for listing as Endangered; FPT = Federally proposed for listing as Threatened; FPD = Federally proposed for delisting; FC = Federal Candidate Species (former Category 1 candidates); FSC = Federal Species of Concern. SE = State-listed as Endangered; ST = State-listed as Threatened; SCE = State candidate for listing as Endangered; SCT = State candidate for listing as Threatened; CSC = California Species of Concern; SR = California Rare Species; FP = California Fully Protected Species. None = no federal or state status. *Status applies to nesting/wintering sites only.

Source: CDFG, 2003a-d. ²Additional Listings

California Native Plant Society (CNPS). List of Species Designation: 1B = Rare or endangered in California and elsewhere (meets CDFG criteria for rare or endangered listing); 2 = Rare or endangered in California, more common elsewhere; 3 = Plants about which more information is needed; 4 = Plants of limited distribution.

Source: CDFG, 2003a-d. ³Habitat Abbreviations

CSS = Coastal Sage Scrub; CHP = Chaparral.

Source: CNPS 2001.

PROJECT IMPACT ANALYSIS

CEQA guidelines δ 15065 state that a project may have a "significant effect on the environment" if:

- "The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."
- "The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals."
- "The project has possible environmental effects which are individually limited but cumulatively considerable."

The following text provides a qualitative and, where possible, quantitative analysis of all expected biological resource impacts resulting from the proposed project, as well as a determination of biological significance for each expected impact per CEQA.

DIRECT IMPACTS

CEQA guidelines define a direct impact as "effects which are caused by the project and occur at the same time and place" and produce a temporary or permanent biologically significant, "physical change" in the environment (California Resources Agency 2001, δ15358).

Vegetation Community Direct Impacts

The proposed project would result in permanent, direct impacts to portions of the on-site native and non-native vegetation communities (Table 3). The proposed equipment cabinets and rack would result in impacts only to Disturbed Habitat, associated with the existing Verizon® telecommunications facility. The monopine, coax cable run from the equipment shelter to the monopine, and the required fire clearing would result in impacts to Disturbed Habitat, Non-Native Vegetation, and Coastal Sage-Chaparral Scrub. Impacts to Coastal Sage-Chaparral Scrub are biologically significant and mitigation measures should reduce impacts to a level below significant.

Table 3. Quantitative Summary of On-site Vegetation Community Impacts.

Vegetation Community	Acres (%) On-site	Acres (%) Impacted On-site	Acres (%) Remaining On-site
Coastal Sage-Chaparral Scrub	1.09 (50%)	0.03 (1%)	1.06 (49%)
Disturbed Habitat	0.72 (33%)	0.08 (4%)	0.64 (29%)
Non-Native Vegetation	0.06 (3%)	0.01 (1%)	0.05 (2%)
Urban/Developed	0.30 (14%)	0.05 (2%)	0.25 (12%)
Total:	2.17 (100%)	0.17 (8%)	2.00 (92%)

Designated Critical Habitat Direct Impacts

The proposed project would result in direct impacts to 0.03 acre of USFWS designated critical habitat for the Coastal California Gnatcatcher and Arroyo Toad. However, since the project site consists of atypical gnatcatcher habitat (given the open and unusually low-growing vegetation dominated by sporadic chaparral shrubs) and does not contain the primary constituent, upland habitat element required by the Arroyo Toad, the proposed project is not expected to lead to the destruction or adverse modification of Coastal California Gnatcatcher or Arroyo Toad critical habitat.

Sensitive Species Direct Impacts

The two regionally sensitive flora species, Cismontane Nolina and Parry's Tetracoccus, identified on the project site are located outside of the required fuel modification area; therefore, the proposed project would not result in direct impacts to these species.

Since the project site is not expected to support an abundant or diverse prey base for raptor foraging, potential impacts to raptor foraging would not be considered biologically significant.

INDIRECT IMPACTS

CEQA guidelines define an indirect impact as "effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable" and produce a temporary or permanent biologically significant, "physical change" in the environment (California Resources Agency 2001, δ 15358). The proposed project is expected to result in temporary indirect impacts to wildlife, most notably from the effects of noise and dust, associated with the construction the facility. In addition, the disturbance/clearing of native vegetation could result in conditions suitable for nonnative, weedy species intrusion. However, these impacts would not be considered significant if project mitigation measures are implemented to ensure conformance with CEQA.

CUMULATIVE IMPACTS

CEQA guidelines define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (California Resources Agency 2001, δ 15355). The aforementioned direct and indirect impacts resulting from the proposed project are not expected to be considered cumulatively if project mitigation measures are implemented to ensure conformance to CEQA.

MITIGATION REQUIREMENTS AND RECOMMENDATIONS

The following text addresses applicable mitigation measures to provide assurance that significant biological impacts associated with the proposed project will be mitigated to a level below significant.

- 1) Prior to construction, orange construction fencing shall be installed along the perimeter of the fuel modification area and grading shall not occur beyond this fencing. Construction crews shall be made fully aware of this boundary.
- 2) Construction equipment shall be kept on the existing access roads or cleared areas.

- 3) Soils from construction grading shall be stockpiled within existing disturbed areas to minimize erosion into the surrounding native habitat.
- 4) On-site vehicle speed shall be limited to minimize impacts from fugitive dust created during clearing and grading activities.
- 5) Spoils, trash, or any debris shall be removed off-site to an approved disposal facility.
- 6) Impacts to Coastal Sage-Chaparral Scrub shall be mitigated through the off-site purchase of 0.06 acres (2:1 replacement ratio) of mitigation property, consisting of in-kind (or higher value) coastal sage scrub habitat, located within, or anticipated to be included within, habitat preserves under regional planning programs. The mitigation property shall be purchased in fee title or with an open space easement over the mitigation site, and shall be located within the North County MSCP Subarea.

Three alternative locations were evaluated for placement of the Cingular® equipment cabinets: 1) the existing concrete pad on top of the hill between the single-family residence and SDG&E easement, 2) the hillside area on the northeastern side of the driveway across from the existing Verizon® pole, and 3) the area beneath the SDG&E tower. The first two locations consist of Disturbed Habitat; however, the concrete pad is currently being utilized by the property owner, and leech field lines are located in the hillside area on the northeastern side of the driveway. At the third location, SDG&E would require that the equipment cabinets be located at least 10 feet outside of their "power drip line", which would place the cabinets on a very steep slope, which supports native vegetation. Therefore, the best alternative project location for the Cingular® equipment cabinets was determined to be near the existing Verizon® equipment shelter in Disturbed Habitat with a longer coax cable run to the antennas on the proposed monopine.

Three alternative locations were also evaluated for placement of the Cingular® antennas: 1) on the existing Verizon® pole, 2) on the single-family residence house, or 3) on the SDG&E tower. The Verizon® pole would not create enough height for the antennas to meet the coverage objective for the area, and the property owner objected to the antennas being placed on the house. The antennas also could not be placed high enough on the SDG&E tower to meet the coverage objective, and the location would require a longer cable run from the equipment shelter through additional native vegetation, which would also diminish the power and effectiveness of the signal from the antennas. Therefore, the best alternative location for the Cingular® antennas was determined to be adjacent to residence driveway, which would reduce the length of the coax cable run, on a monopine that would provide some camouflage for the antennas.

Since alternative locations for placement of the proposed Cingular® monopine and equipment shelter are either not feasible or would result in greater biological impacts, it is recommended that the County fuel modification requirement be slightly reduced and remain within the existing Verizon® fuel modification zone to avoid the 0.03 acre impact to Coastal Sage-Chaparral Scrub and designated critical habitat. This recommendation would eliminate the need for a Habitat Loss Permit and NEPA compliance.

Implementation of the project mitigation measures should reduce biological impacts to a level below significant and ensure compliance with NEPA/CEQA.

LITERATURE CITED

- American Ornithologists' Union. 1998. Check-List of North American Birds. 7th edition. American Ornithologists' Union, Washington D.C.
- American Ornithologists' Union. 2003. List Of The 2,031 Bird Species (With Scientific And English Names) Known From The A.O.U. Check-List Area. The Auk 120:923-932.
- Bowman, R. H., R. E. Bishop, R. W. Griffin, and M. L. Jones. 1973. Soil survey, San Diego area, California. U.S. Department of Agriculture.
- California Department of Fish and Game, Natural Diversity Database. 2003a October. State and Federally Listed Endangered and Threatened Animals of California. Biannual publication, Mimeo. 10 pp. http://www.dfg.ca.gov/whdab/TEAnimals.pdf>. Accessed October 2003.
- ____. 2003b July. Special Animals. Quarterly publication, Mimeo. 44 pp. http://www.dfg.ca.gov/whdab/spanimals.pdf>. Accessed October 2003.
- 2003c July. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Quarterly publication, Mimeo. 14 pp.
 - http://www.dfg.ca.gov/whdab/TEPlants.pdf. Accessed October 2003.
- 2003d June 23. Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication, Mimeo. 88 pp. http://www.dfg.ca.gov/whdab/spplant.pdf>. Accessed October 2003.
- . 2003 July. CNDDB California Natural Diversity Database, commercial version. Wildlife and Habitat Data Analysis Branch.
- California Resources Agency. 2003 July 22. CEQA, The California Environmental Quality Act, Guidelines. Cooperative effort among the California Resources Agency, its programs CERES and LUPIN, and the Governor's Office of Planning and Research. http://ceres.ca.gov/topic/env_law/ceqa/guidelines/. Accessed October 2003.
- _. 2003 January 1. CEQA, The California Environmental Quality Act, Statute. Cooperative effort among the California Resources Agency, its programs CERES and LUPIN, and the Governor's Office of Planning and Research. < http://ceres.ca.gov/topic/env_law/ceqa/stat/>. Accessed October 2003.
- County of San Diego. 2003 August 15. Pre-Approved Mitigation/Hardline Preserve Areas. Working Draft, North County Subarea Plan. Multiple Species Conservation Program. http://www.sangis.org/sangis/mapgal/dplu0013a/index.html. Accessed October 2003.
- . 2002a June 4. Biological Resource Mapping Requirements. Department of Planning and Land Use. 11 pp.
 - http://ceres.ca.gov/topic/env law/ceqa/guidelines/>.

Accessed October 2003.

- ______. 2002b April 12. Composite NCSAP Habitat Evaluation Model Results. Working Draft, North County Subarea Plan. Multiple Species Conservation Program.

 http://cosda102.co.san-diego.ca.us//8 nocoup/ncmscp hem.pdf. Accessed October 2003.

 ______. 1991 October 10. Resource Protection Ordinance. Board of Supervisors. 16pp.
- Hickman, James C., ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, California. 1400pp.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, State of California. Department of Fish and Game, Sacramento, California. 157 pp.
- Merkel & Associates, Inc. 2001a May 2. 45-day Letter Report of Focused Quino Checkerspot Butterfly (*Euphydryas editha quino*) Surveys for the Verizon® Wireless Pala Road Project Site. Prepared for USFWS. 9 pp. + appendices.
- ______. 2001b January 19. Biological Resources Report for the Verizon® Wireless Pala Road Project Site. Prepared for JM Consulting Group, Inc. 23 pp. + appendices.
- ______. 2000 December 13. 45-day Letter Report of Focused Coastal California Gnatcatcher (*Polioptila californica californica*) Surveys for the Verizon® Wireless Pala Road Project Site. Prepared for USFWS. 8 pp. + appendices.
- Oberbauer, T. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. San Diego Association of Governments, San Diego, California. 6 pp.
- Ogden, in conjunction with the Resource Agencies, Local Jurisdictions, and members of environmental, building and development communities. 1998 August. Final Multiple Species Conservation Program MSCP Plan. 8 sections + attachments.
- Opler, Paul A., and A. B. Wright. 1999. A Field Guide to Western Butterflies. Second Edition Houghton Mifflin Company. Boston and New York. 540 pp.
- California Native Plant Society (CNPS). 2001. Inventory of rare and endangered plants of California. Sixth edition. Rare Plant Scientific Advisory Committee. David P. Tibor, convening editor. Sacramento, California. X+388 pp.
- Strand RG. 1962. Geologic Map of California, San Diego-El Centro Sheet. Fourth printing 1993. State of California, The Resources Agency Department of Conservation, Division of Mines and Geology. Sacramento, California.
- United States Department of the Interior, Fish and Wildlife Service (USFWS). 2001 February 7. Designation of Critical Habitat for the Arroyo Toad, Final Rule. Federal Register, Vol. 66, No. 26.
 - http://carlsbad.fws.gov/Rules/ArroyoToad_Documents/arroyotoad_fch.pdf. Accessed October 2003.

______. 2000 Ocotber 24. Designation of Critical Habitat for the Coastal California Gnatcatcher, Final Rule. Federal Register, Vol. 65, No. 206. http://carlsbad.fws.gov/Rules/GnatCatcher Documents/PDF/CAGN Final CH Fed Regist er.pdf>. Accessed October 2003.

United States Department of the Interior, Geological Survey (USGS). 1968. Pala Quadrangle, California 7.5 Minute Series (Topographic). Denver, Colorado or Reston, Virginia. Photo Revised/Inspected 1988.

Conner Residence Cingi	ular Wireless Facility
	APPENDIX 1. PROJECT SITE PHOTOGRAPHS.



Photo Point 1. Looking southeast along the dirt access road at the existing Verizon equipment shelter. (9/5/2003)



Photo Point 2. Looking southeast at the proposed location for the Cingular equipment rack, adjacent to the southern side of the existing Verizon equipment shelter. (9/5/2003)



Photo Point 3. Looking northeast at the proposed location for the Cingular equipment cabinets, southeast of the existing Verizon tower. (9/5/2003)



Photo Point 4. Looking southwest at the proposed location for the Cingular equipment cabinets, adjacent to the northern side of the existing Verizon equipment shelter. (9/5/2003)



Photo Point 5. Looking northeast at the proposed location for the Cingular monopine. (9/5/2003)

APPENDIX 2. FLORA SPECIES OBSERVED ON-SITE.

Vegetation Communities:

C = Coastal Sage-Chaparral Scrub

D = Disturbed Habitat

N = Non-Native Vegetation

* = Denotes non-native flora species.

Nomenclature Source: Hickman 1993.

Scientific Name	Common Name	Habitat
CRYPTOGAMS		
Pteridaceae - Brake Family <i>Pentagramma triangularis</i> (Kaulf.) Yats. ssp. t <i>riangularis</i>	California Goldenback Fern	С
Selaginellaceae - Spike-Moss Family <i>Selaginella bigelovii</i> Underw.	Bigelow's Mossfern	С
DICOTYLEDONS		
Aizoaceae - Carpet-weed Family *Mesembryanthemum sp.	Iceplant	N
Anacardiaceae - Sumac Family Malosma laurina (Torr. & Gray)Abrams Rhus ovata Wats.	Laurel Sumac Sugar Bush	C C
Asteraceae - Sunflower Family Artemisia californica Less. Bebbia juncea (Benth.)Greene var. aspera Greene Rush *Centaurea melitensis L. *Conyza bonariensis (L.)Cronq. Deinandra fasciculata Greene Encelia farinosa Torr. Eriophyllum confertiflorum (DC.)Gray var. confertiflorum Filago californica Nutt. Gutierrezia sarothrae (Pursh)Britt. & Rusby Hazardia squarrosa ssp. grindelioides (DC.)Clarke Heterotheca grandiflora Nutt. Isocoma menziesii (Hook. & Arn.)Nesom var. menziesii Porophyllum gracile Benth. *Sonchus asper (L.)Hill *Sonchus oleraceus L.	California Sagebrush Sweetbush Tocalote Flax-leaf Fleabane Fascicled Tarplant Brittlebush Golden-yarrow California Filago Matchweed Saw-toothed Goldenbush Telegraph Weed Goldenbush Odora Prickly Sow Thistle Common Sow Thistle	C C D D C C C C C C D D
Boraginaceae - Borage Family <i>Cryptantha intermedia</i> (Gray)Greene	Nievitas, Cryptantha	C
Brassicaceae - Mustard Family *Hirschfeldia incana (L.)LagrFossat	Short-pod Mustard	D
Cactaceae - Cactus Family Opuntia littoralis (Engelm.)Ckll.	Coast Prickly-pear	C
Caprifoliaceae - Honeysuckle Family Lonicera subspicata var. denudata Rehd.	San Diego Honeysuckle	C
Chenopodiaceae - Goosefoot Family		

Scientific Name	Common Name	Habitat
*Salsola tragus L.	Russian Thistle	D
Convolvulaceae - Morning-Glory Family Calystegia macrostegia (Greene)Brumm. ssp. intermedia (A	Abrams)Brumm. Morning-glory	С
Ericaceae - Heath Family Xylococcus bicolor Nutt.	Mission Manzanita	C
Euphorbiaceae - Spurge Family Tetracoccus dioicus Parry	Parry's Tetracoccus	С
Fabaceae - Pea Family <i>Lotus scoparius</i> ssp. <i>brevialatus</i> (Ottley)Munz	Deerweed	С
Geraniaceae - Geranium Family **Erodium brachycarpum (Godr.)Thell. Geranium sp. L.	Short-beak Filaree Geranium	C,D N
Lamiaceae - Mint Family Salvia apiana Jeps. Salvia columbariae Benth. Salvia mellifera Greene	White Sage Chia Black Sage	C C C
Myrtaceae - Myrtle Family *Eucalyptus sp.	Eucalyptus	N
Polygonaceae - Buckwheat Family Eriogonum fasciculatum Benth. var. polifolium (DC.)Torre	y& Gray Rosemary Flat-top Buckwheat	C
Rhamnaceae - Buckthorn Family Rhamnus ilicifolia Kell.	Holly-leaf Redberry	С
Rosaceae - Rose Family Adenostoma fasciculatum Hook & Arn.	Chamise	С
Rubiaceae - Madder Family Galium angustifolium Nutt. ex Torrey & Gray ssp. angustif	olium Narrow-leaf Bedstraw	C
Scrophulariaceae - Figwort Family <i>Keckiella antirrhinoides</i> (Benth.)Straw var. <i>antirrhinoides Mimulus aurantiacus</i> Curtis	Yellow Bush Penstemon San Diego Monkeyflower	C C

Scientific Name	Common Name	Habitat
MONOCOTYLEDONS		
Arecaceae - Palm Family		
*Phoenix sp. Chaub.	Date Palm	N
Liliaceae - Lily Family		
*Agave americana L.	American Agave	N
Hesperoyucca whipplei Torr.	Our Lord's Candle	C
Nolina cismontana Dice	Cismontane Nolina	C
Poaceae - Grass Family		
*Avena barbata Link	Slender Wild Oat	C,D
*Bromus madritensis L. ssp. rubens (L.)Husnot	Red Brome	C,D
Melica imperfecta Trin.	Coast Range Melic	C
Nassella lepida (A.S. Hitchcock)Barkworth	Foothill Needlegrass	C
*Vulpia myuros (L.)Gmelin var. hirsuta (Hacketl)Asch	& Graetoner	
	Foxtail Fescue	C,D

APPENDIX 3. FAUNA SPECIES OBSERVED OR DETECTED

Habitat Types:

C = Coastal Sage-Chaparral Scrub

D = Disturbed Habitat

N = Non-Native Vegetation

Abundance Codes:

- A = Abundant: Almost always encountered in moderate to large numbers in suitable habitat and the indicated season.
- C = Common: Usually encountered in proper habitat at the given season.
- U = Uncommon: Infrequently detected in suitable habitat. May occur in small numbers or only locally in the given season.
- R = Rare: Applies to species that are found in very low numbers.

'Numbers' indicate the number of individuals observed during the recent survey work.

Status Codes:

- M = Migrant: Uses the site for brief periods of time, primarily during the spring and fall months.
- R = Year-round resident: Probable breeder on-site or in the vicinity.
- S = Spring/summer resident: Probable breeder on-site or in the vicinity.
- T = Transient: Uses site regularly but unlikely to breed on-site.
- W = Winter visitor: Does not breed locally.

Nomenclature Sources: Butterflies: Opler 1999; birds: American Ornithologsts' Union 2002

Common Name	Scientific Name	Habitat	Abundance	Status
BUTTERFLIES				
Papilionidae (Swallowtail Butterf	lies)			
Western Tiger Swallowtail	Papilio rutulus	C	C	-
Pieridae (White, Orange-tip, and				
Checkered White	Pontia protodice	С	С	-
Riodinidae (Metalmarks) Behr's Metalmark	Apodemia virgulti	С	С	-
BIRDS				
Accipitridae (Hawks, Old World	Vultures, and Harriers)			
Red-tailed Hawk	Buteo jamaicensis	C	C	R
Phasianidae (Quails, Pheasants, a	nd Relatives)			
California Quail	Callipepla californica	C	C	R
Charadriidae (Plovers and Relati	ves)			
Killdeer	Charadrius vociferus	С	С	R
Trochilidae (Hummingbirds)		~	~	_
Anna's Hummingbird	Calypte anna	С	С	R
Corvidae (Jays, Magpies, and Cro			a	
Common Raven	Corvus corax	С	С	R
Timalidae (Wrentit)				
Wrentit	Chamaea fasciata	С	A	R
Mimidae (Mockingbirds and Thr	-	C	C	D
Northern Mockingbird	Mimus polyglottos	С	С	R
Aegithalidae (Bushtit) Bushtit	Do altain anna minimus	С	C	D
Busilut	Psaltriparus minimus	C	С	R
Troglodytidae (Wrens)		C	C	D
Canyon Wren Bewick's Wren	Catherpes mexicanus Thryomanes bewickii	C C	C C	R R
	•			
Emberizidae (Sparrows, Blackbir California Towhee	ds and Relatives) Pipilo crissalis	С	С	R
	- puo ormania	C	C	I.
Fringillidae (Finches) House Finch	Carnodaeus mericanus	N	٨	R
Lesser Goldfinch	Carpodacus mexicanus Carduelis psaltria	N C	A C	R R
		-	2	

	Conner Residence Cingular Wireless Facility						
APPENDIX	44. CALIFORNIA NATIVE SPECIES FIELD SURVEY FORMS						

であった。

高端の

是是是

の影響が、対

The House

の形が大力

ののなら

Mail to: California Natural Diversity Database Department of Fish and Game 1807 13th Street, Sulte 202 Sacramento, CA 95814 Fáx: (918) 324-0475

- 1	For Office Use Only				
	Source Code	Quad Code			
Ì	Elm Code	Occ. No.			
_ [EO index No	Map Index No.			
1					

EO inde	ex No Map Index No
Dete of Field Work: 9 _ 5 _ 2003	
California Native Specie	es Field Survey Form
scientific Name: Nolina cismontana	는 하는 사람들에게 되었다. 그런 사람들은 경우를 통해 하고 있다. 그는
Common Name: Cismontane Nolina	
Species Found? Yes No If not, why?	Reporter: Diana M. Jensen
Total No. Individuals 10 Subsequent Visit? ☐ yes ☐ no	Address: Merkel & Associates, Inc. 5434 Ruffin Road, San Diego California 92123
is this an existing NDDB occurrence?	E-mail Address: djensen@merkelinc.com
Callection? If yes: Number Museum / Herbarium	Phone: (858) 560-5465
Plant Information Animal Information	
Plant imormaged	
Phenology: % % # edults	# juveniles # larved # ogg masses # unknown
yegelstive flowering fruiting	
breeding win	tering burrow site rookery needing other
Location Description (please attach map <u>AND/OR</u> fill o	ut your choice of coordinates, below)
	owner / Mgr.:
Quad Name; Pala	Elevation: 960
T_9S_R 2W Sec_29 ,1/4 of1/4, Meridian: HO MO SO	Source of Coordinates (GPS, topo, map & type):
TR Sec, 1/4 of 1/4, Meridian: HO MO SO	GPS Make & Model
Detum: NAD27 ☐ NAD83 ☐ WGS84 ☐	Horizontal Accuracy maters/feet
Coordinate System; UTM Zone 10 ☐ UTM Zone 11 ☐ OR	Geographic (Latitude & Longitude) □
Coordinates: Easting/Longitude	Northing/Latitude
Habitat Description (plant communities, dominants, essociates, substrates/at The project site consists of coastal sage-chaparral scrub dominated by Flavith inclusions of several chaparral plants, such as Holly-leaf Redberry (Mission Manzanita (Xylococcus bicolor). Shrubby chaparral plants are splants represented intermittently in the understory. On-site soils are map slopes. Several scattered plants and one large patch of Cismontane Nolin Other rare species? Tetracoccus dioicus	at-top Buckwheat (Eriogonum fasciculatum var. polifolium), Rhamnus ilicifolia), Chamise (Adenostoma fasciculatum), and parsely distributed throughout the habitat, with sage scrub ped as Las Posas stony fine sandy loam, 30 to 65 percent
Site Information Overall site quality: Descellent 20	Good
Current / surrounding land use: native vegetation	La rain La rooi
Visible disturbances:	
Threats:	
Comments:	
Determination: (check one or more, and fill in blanks) Keyed (cite reference): Compared with specimen housed at: Compared with photo / drawing in: By another person (name): Craig H. Reiser Other:	Photographs: (check one or more) Plant / animal Habitat Diagnostic feature May we obtain duplicates at our expense? Slide Print Print

PRINCIPLE TAT No. 1000

湖

To the second

全等通

智神性

光光

E SE

Mail to: California Natural Diversity Database Department of Fish and Game 1907 13" Street, Suite 202 Secramento, CA 95814 Fáx: (918) 324-0475

	For Office Use Only
Source Code	Quad Code
Elm Code	Occ. No
EO Index No.	Map Index No

EO Index	No Map Index No	_				
Data of Field Work:						
California Native Species	Field Survey Form					
Scientific Name: Tetracoccus dioicus		. * *				
Common Name: Parry's Tetracoccus		. :				
Species Found? Yes No if not, why? Total No. Individuals 2 Subsequent Visit? yes no ls this an existing NDDB occurrence? Yes, Occ. # Collection? If yes: Number Museum / Herbarium	Reporter: Diana M. Jensen Address: Mcrkel & Associates, Inc. 5434 Ruffin Road, San Diego California 92123 E-mail Address: djensen@merkelein.com Phone: (858) 560-5465					
Plant Information Animal Information						
Phenology: % %% stadults Vegetative flowering fruiting		_				
Location Description (please attach map AND/OR fill out	t your choice of coordinates, below)					
County: San Diego Landowner / Mgr.: Quad Name: Pala T 98 R 2W sec 29 , % of % Meridian: HC MC SC Source of Coordinates (GPS, topo. map & type): T R Sec , % of % Meridian: HC MC SC GPS Make & Model Patum: NAD27 NAD83 WGS84 Horizontal Accuracy meters/feet Coordinate System: UTM Zone 10 UTM Zone 11 C OR Geographic (Latitude & Longitude) Coordinates: Easting/Longitude Northing/Latitude						
Habitat Description (plent communities, dominants, associates, substrates/soil		ı				
The project site consists of coastal sage-chaparral scrub dominated by Flat- with inclusions of several chaparral plants, such as Holly-leaf Redberry (RI Mission Manzanita (Xylococcus bicolor). Shrubby chaparral plants are spe plants represented intermittently in the understory. On-site soils are mapped Other rare species? Nolina cismontana	hamnus ilicifolia), Chamise (Adenostoma fasciculatum), and arsely distributed throughout the habitat, with sage scrub	'				
Site Information Overall site quality: Excellent EG	ood 📙 Fair 🔲 Poor	\neg				
Current / surrounding land use: native vegetation						
Visible disturbances:						
Threats:						
Comments:						
Determination: (check one or more, and fill in blenks) Keyed (cite reference): Compared with specimen housed at: Compared with photo / drawing in: By another person (name): Craig F. Reiser Other:	Photographs: (check one or more) Slide Print Plant / animal Habitat Diagnostic feature May we obtain duplicates					
	at our expense?	;				